#### SUBCOMMITTEE ON THE FEDERAL WORKFORCE AND AGENCY ORGANIZATION

Mr. Chairman, Ranking Member Davis and distinguished members of the Subcommittee, thank you for inviting Christiana Care Health System to submit a formal statement for the record on the important topic of using electronic health records to improve the quality of healthcare in this country. I am Dr. Edward F. Ewen, Jr., a member of the Department of Internal Medicine and Director of Clinical Informatics at Christiana Care Health System.

Based in Wilmington, Delaware, Christiana Care Health System is one of the largest health care providers in the mid-Atlantic region, delivering about half the care for all the residents of Delaware and serving portions of Pennsylvania, Maryland and New Jersey. Christiana Care is a not-for-profit, privately owned organization that includes two hospitals, Christiana Hospital and Wilmington Hospital. Our core values include caring, integrity, leadership, service and teamwork and we follow a tradition of providing excellent healthcare to our community, as evidenced by our accreditation in a 2005 survey by the Joint Commission on Accreditation of Health Care Organizations (JCAHO).

As an internist and treating physician at Christiana Hospital, I believe that having more information about a patient at the point of care can greatly impact the quality of care that a physician can provide. Therefore, I enthusiastically support the Federal Family Health Information Technology Act of 2006 and am very happy to provide testimony on how electronic health records can benefit patients, based on our experience at Christiana Care.

# Better information leads to better care

Physicians need a reasonably complete medical picture of a patient in order to make important medical decisions. Unfortunately, they are often unable to get complete and accurate information quickly enough to determine the best course of care to obtain the best outcome. This is especially true in an emergency room, where patients can arrive unconscious and unaccompanied. Physicians have little or no knowledge of the patient's existing medical conditions, whether they are taking medication, or if they are susceptible to allergic reactions. In such instances, physicians have the greatest need for patient data, yet are least likely to be able to obtain it.

Emergency room physicians attempt to obtain medical information about arriving patients by interviewing them if they are conscious, inquiring about their histories from family members or from the ER's computerized records if the patient had been treated there previously. An internal electronic record system is often the sole means of obtaining patient data for patients that arrive unconscious and alone.

### Integrating electronic patient clinical summaries into the workflow

In September of 2005, Christiana Care integrated the electronic availability of patient clinical summaries into our workflow at our Level 1 Trauma Center. This project was a joint effort of Christiana Care; our largest payer, Blue Cross Blue Shield of Delaware (BCBSD) and their technology provider, MEDecision, Inc. For the first time in the nation's history, a dominant health plan is analyzing and summarizing all the data they have about a member to create a complete patient clinical summary and exporting it in

Dr. Edward F. Ewen, Jr. Christiana Care Health System Testimony (Final) 3/15/06

real-time when a patient arrives in our emergency room. Health plan member data are made immediately available when and where physicians need it most, at the point of care.

In order for the use of payer-based health records to be practical, there have to be enough records available to make it worth the provider's while to change their workflow to accommodate it. In other words, if there is only an electronic record for one out of every 1000 patients, staff will be less inclined to look for those records. However, if there is a great enough presence by the health plan in a region, the admitting staff would be more likely to routinely look for the records because there would be an electronic health record for the majority of patients seeking service. We had the perfect situation in place for our pilot program since our payer partner, BCBSD, covers nearly 50% of the privately insured population in our coverage area.

Now, every time a BCBSD member arrives at the ER, it is part of the admission staff's workflow to perform an eligibility transaction through BCBSD, pull down the printable version of the patient clinical summary and give it to the triage nurse, who records the information in the record or hands it to a doctor.

The ER physician now has a more complete picture of what conditions a patient has, the relative severity of those conditions, what drugs they're on, the last time they were in an ER or hospital, who their doctors are and the physicians' phone numbers. For example, if a heart patient has a cardiologist, we have their name and phone number readily available, which saves time at a critical moment.

The patient clinical summary improves patient safety by disclosing the patient's drug information, allowing us to avoid conflicting and possibly incompatible combinations of medication. For example, out of a total of 59 ER admissions in one month, in three different instances we discovered that people with heart conditions had also filled prescriptions for Viagra, yet did not admit it to the admissions staff. This information could save a person's life.

#### Mandating a payer-based health record: a starting point for the EHR initiative

I strongly support the Federal Family Health Information Technology Act of 2006 because mandating a payer-based health record is the logical starting point for the electronic health record initiative that promises to improve healthcare and reduce costs for all citizens in this country.

While having some information is better than having none, having good information is the best. In order for the payer-based health record to be valuable, it cannot simply be just a summarization of raw claims data. A very sick patient can have hundreds of claims items in their records and a physician can't possibly pour through that. We need to have the information cleaned and validated according to clinical rules. The good news about the patient clinical summary that we're using from BCBSD is that all of that clinical validation is already done, which is not the case in all the systems we have seen out there.

Dr. Edward F. Ewen, Jr. Christiana Care Health System Testimony (Final) 3/15/06

#### Clinical staff places high value on patient clinical summary

We have had a phenomenal experience using patient clinical summaries at Christiana Care Health System. Probably one of the greatest compliments a cadre of clinicians can give to a new tool is to depend on it so much that it becomes completely integrated into their workflow.

Bringing in new technology or a new piece of information and introducing it into the workflow of a very complex and hectic emergency environment is a daunting task, and it took us a fair amount of time to work out the details. But once we went live, it was a matter of weeks before we were up and running. Patient clinical summaries have been integrated into the workflow of the clerks, nurses and physicians, and they use it on everyone they can find information on. Not every patient in the database will have data for us to see because some of them are not on medication or don't have much in the way of medical problems, but for the majority of the participating patients, there's something there to find.

Because we're a Level 1 trauma center, we see many people who come in either unconscious or with their level of consciousness impaired. One of the immediate quick wins for the trauma team and the emergency room was having any information on a patient that came in as a trauma code. Frequently these people come in from an automobile accident or work-related accident, so they come in with almost no information whatsoever.

# More complete medication information 48% of the time

In an unofficial test of the value of patient clinical summaries, Dr. Paul Kaplan of BCBSD and I went through nearly a month's worth of BCBSD patients who had come into our ER that were ranked at the highest severity levels by our triage system. We looked at the medication lists that we were collecting on these patients at the triage desk, and compared them with the data that was available through the patient clinical summary from BCBSD for congruence and completeness.

In 25% of the cases, both our nurses taking histories from the patients and the data from the patient clinical summary agreed almost completely in all important aspects. In another 25% of the cases, we had more information than the summary, primarily because of one over-the-counter medication, aspirin, that doesn't show up in claims records. In 48% of the cases, the patient clinical summary had more information than we had in our record. That's how we made the case internally for this initiative being very important. It's how we convinced our clerical staff that when they identified a BCBSD patient, they needed to take a second to go online, bring up the patient clinical summary and print it out. That percentage number set the stage for the potential benefit of patient clinical summaries. And it's just one aspect of the patient clinical summary—medications.

#### Physician list and phone numbers save critical time

Another aspect of the patient clinical summary that our doctors find very useful from an efficiency standpoint, particularly if a heart patient has a cardiologist, is the physician list. The physician list includes the direct dial contact information for every physician who has

Dr. Edward F. Ewen, Jr. Christiana Care Health System Testimony (Final) 3/15/06

seen the patient in question and saves our staff the time of searching for those names within our systems or by interviewing the patient or their families.

One of the most important things emergency physicians need to do is get in touch with the patient's outpatient care physician. A good example is orthopedic injuries, which usually don't occur on a regular basis, so frequently the patient won't remember the name of their orthopedist. Having this information readily available shortens the search time necessary to find the appropriate follow-up care for the patient.

## **Anticipation of significant ROI**

Although there hasn't been enough time to make a definitive statement, cost savings can be easily recognized through a reduction in duplicate testing. Having a list of previously ordered, high-cost imaging procedures available while making a decision on ordering new tests has a great impact on the cost of care. The significant problem in an ER is that you do not have a longitudinal relationship with the patient, so you do not have access to that information. The patient clinical summary provides or backfills what, for a primary care physician, would be handled with a longitudinal record.

#### Bringing payers and providers closer together

We rarely get the opportunity to work closely with a payer developing innovative approaches to improving patient care in real-time at the bedside. What the ER physicians and clinicians came to understand through the process of implementing the patient clinical summaries is that everyone is trying to do what is best for the patient.

The relationship between payers and providers has historically been antagonistic, but the patient clinical summary is a tangible example of how we can help each other. Before the patient clinical summary pilot program, I do not think physicians in the ER ever really had the chance to appreciate what a payer has to offer in terms of improving care. I can see a change in the ER physicians' and staff attitudes since beginning this program when they talk about the difference having this summary makes when they're seeing patients, and their recognition that it's been given to them by the predominant payer in this state.

In conclusion, the patient clinical summary is a hands-down winner from a clinical care standpoint, and there isn't a member of the staff who wouldn't agree with that here. It's so much better to be able to work with information than to be working in the dark. The relief that it brings people, the peace of mind alone as a practitioner is worth a lot.

For this reason, I enthusiastically support the Federal Family Health Information Technology Act of 2006. Based on our experience with payer-based health records from Blue Cross Blue Shield of Delaware and MEDecision, I feel that the technology proposed by this bill will improve the care and affordability of healthcare for the 8.5 million federal employees. I also believe it will ultimately help to extend this valuable technology to all citizens in our country.

Thank you, Mr. Chairman and Ranking Member Davis for the opportunity to appear before this Subcommittee. I am happy to answer any questions you may have.